

Ernest Cory (*Admitted Pro Hac Vice*)
Alabama Bar No.: asb-2279-y83e
CORY WATSON, P.C.
2131 Magnolia Avenue
Birmingham, AL 35205
Telephone: (205) 328-2200
Facsimile: (205) 324-7896
Email: ecory@corywatson.com

Lead Counsel for Plaintiffs

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
(SAN FRANCISCO DIVISION)**

IN RE: VIAGRA (SILDENAFIL CITRATE)
AND CIALIS (TADALAFIL) PRODUCTS
LIABILITY LITIGATION

Master File No.: 3:16-md-02691-RS

MDL No.: 2691

This Document Relates to : ALL ACTIONS

**DECLARATION OF ERNEST CORY IN
SUPPORT OF PLAINTIFFS' MOTION
TO EXCLUDE CERTAIN OF DEFENSE
EXPERTS' OPINIONS**

I, Ernest Cory, make this Declaration under penalty of perjury in support of Plaintiffs' Motion to Exclude Certain of Defense Experts' Opinions and submit the following information:

1. I am Lead Counsel for plaintiffs in this matter and know the following facts of my own personal knowledge and, if called to testify thereto, I could and would competently do so.
2. Annexed hereto as PX 1 is a true and correct copy of Bishop *et al.*, *The Prevention, Diagnosis, Referral & Management of Melanoma of the Skin: Concise Guidelines*, 7 CLINICAL MED. 283 (2007); PX 2, Goldstein & Tucker, *Dysplastic Nevi & Melanoma*, 22 CANCER EPI. BIOMARKERS & PREV. 528 (2013).

3. Annexed hereto as PX 2 is a true and correct copy of Goldstein & Tucker, *Dysplastic Nevi & Melanoma*, 22 CANCER EPI. BIOMARKERS & PREV. 528 (2013).
4. Annexed hereto as PX 3 is a true and correct copy of Ossowski & Aguirre-Ghiso., *Dormancy of Metastatic Melanoma*, 23 PIGMENT CELL MELANOMA RES. 41 (2010).
5. Annexed hereto as PX 4 is a true and correct copy of Martincorena *et al.*, *Tumor Evolution. High Burden & Pervasive Positive Selection of Somatic Mutations in Normal Human Skin*, 348 SCIENCE 880 (2015).
6. Annexed hereto as PX 5 is a true and correct copy of Shain *et al.*, *The Genetic Evolution of Melanoma from Precursor Lesions*, 373 N. ENGL. J. MED. 1926 (2015).
7. Annexed hereto as PX 6 is a true and correct copy of Nardone *et al.*, *Chronic Daily Dosing of PDE5 Inhibitors (Sildenafil or Tadalafil) for Pulmonary Hypertension & Risk of Subsequent Melanoma: A Report from the RADAR Project*, 79 J. AM. ACAD. DERMATOLOGY AB72 (Sept. 2018).
8. Annexed hereto as PX 7 is a true and correct copy of the American Academy of Dermatology presentation of the Boor 2016 abstract.
9. Annexed hereto as PX 8 is a true and correct copy of the American Academy of Dermatology presentation of the Ma 2017 abstract.
10. Annexed hereto as PX 9 is a true and correct copy of the American Academy of Dermatology presentation of the Nardone 2018 abstract.
11. Annexed hereto as PX 10 is a true and correct copy of Drees *et al.*, *3',5'-Cyclic Nucleotide PDE in Tumor Cells as Potential Target for Tumor Growth Inhibition*, 53 CANCER RES. 3058 (1993).
12. Annexed hereto as PX 11 is a true and correct copy of Mitra *et al.*, *Melanoma & Viagra: An Unexpected Connection*, 24 PIGMENT CELL MELANOMA RES. 16 (2011).
13. Annexed hereto as PX 12 is a true and correct copy of Gray-Schopfer *et al.*, *Melanoma Biology & New Targeted Therapy*, 445 NATURE 851 (2007).

14. Annexed hereto as PX 13 is a true and correct copy of the Cumulative Review of Sildenafil and Melanoma Events produced by Pfizer as PFI02795741.¹
15. Annexed hereto as PX 14 is a true and correct copy of the 2016 Safety Topic Report: Melanoma produced by Eli Lilly as LLY01487173.
16. Annexed hereto as PX 15 is a true and correct copy of a draft version of the 2016 Safety Topic Report: Melanoma produced by Eli Lilly as LLY01722023.
17. Annexed hereto as PX 16 is a true and correct copy of Schonrath *et al.*, *Involvement of VILIP-1 & Opposite Roles of Cyclic AMP & GMP Signaling in In Vitro Cell Migration of Murine Skin Squamous Cell Carcinoma*, 50 MOLECULAR CARCINOGENESIS 319 (2011).
18. Annexed hereto as PX 17 is a true and correct copy of Fidalgo *et al.*, *Role of Rare Germline Copy Number Variation in Melanoma-Prone Patients*, 12 FUTURE ONCOLOGY 1345 (2016).
19. Annexed hereto as PX 18 is a true and correct copy of Hoek *et al.*, *In Vivo Switching of Human Melanoma Cells Between Proliferative & Invasive States*, 68 CANCER RES. 650 (2008).
20. Annexed hereto as PX 19 is a true and correct copy of the 2016 FDA Pharmacovigilance Review produced by Defendants as FDA00000001.
21. Annexed hereto as PX 20 is a true and correct copy of Califano, *et al.*, *Tadalafil Augments Tumor Specific Immunity in Patients with Head and Neck Squamous Cell Carcinoma*, 21 CLIN. CANCER RES. 30 (2015).
22. Annexed hereto as PX 21 is a true and correct copy of Weed *et al.*, *Tadalafil Reduces Myeloid-Derived Suppressor Cells and Regulatory T Cells and Promotes Tumor Immunity in Patients with Head and Neck Squamous Cell Carcinoma*, 21 CLIN. CANCER RES. 39 (2015).

¹ A motion to file PX 13-15 is being filed concurrently with this declaration. The versions of these documents filed herewith are redacted.

23. Annexed hereto as PX 22 is a true and correct copy of Mei *et al.*, *Sildenafil inhibits the growth of human colorectal cancer in vitro and in vivo*, 5 AM. J. CANCER RES. 3311 (2015).
24. Annexed hereto as PX 23 is a true and correct copy of Sarfati *et al.*, *Sildenafil and vardenafil, types 5 and 6 phosphodiesterase inhibitors, induce caspase-dependent apoptosis of B-chronic lymphocytic leukemia cells*, 101 BLOOD 265 (2003).
25. Annexed hereto as PX 24 is a true and correct copy of Sharman *et al.*, *Cyclic-GMP-Elevating Agents Suppress Polyposis in Apc^{Min} Mice by Targeting the Preneoplastic Epithelium*, 11 CANCER PREV. RES. 81 (2018).
26. Annexed hereto as PX 25 is a true and correct copy of Sponziello *et al.*, *PDE5 expression in human thyroid tumors and effects of PDE5 inhibitors on growth and migration of cancer cells*, 50 ENDOCRINE 434 (2015).
27. Annexed hereto as PX 26 is a true and correct copy of Tuttle *et al.*, *The cyclic GMP/protein kinase G pathway as a therapeutic target in head and neck squamous cell carcinoma*, 28 Cancer Lett 279 (2015).
28. Annexed hereto as PX 27 is a true and correct copy of Islam *et al.*, *Sildenafil Suppresses Inflammation-Driven Colorectal Cancer in Mice*, 10 CANCER PREV. RES. 377 (2017).
29. Annexed hereto as PX 28 is a true and correct copy of Lin *et al.*, *Phosphodiesterase-5 inhibition suppresses colonic inflammation-induced tumorigenesis via blocking the recruitment of MDSC*, 7 AM. J. CANCER Res. 41 (2017).
30. Annexed hereto as PX 29 is a true and correct copy of Capuano *et al.*, *Modulators of arginine metabolism support cancer immunosurveillance*, 10 BMC IMMUNOLOGY 1 (2009).
31. Annexed hereto as PX 30 is a true and correct copy of Karakhanova *et al.*, *Characterization of myeloid leukocytes and soluble mediators in pancreatic cancer:*

- 1 *importance of myeloid-derived suppressor cells*, 4 ONCOLMMUNOLOGY e998519
 2 (2015).
- 3 32. Annexed hereto as PX 31 is a true and correct copy of Pantziarka *et al.*,
 4 *Repurposing drugs in oncology (ReDO)-selective PDE5 inhibitors as*
 5 *anticanceragents*, 12 ECANCER MEDICAL SCIENCE 824 (2018).
- 6 33. Annexed hereto as PX 32 is a true and correct copy of Whitt *et al.*, *Sulindac sulfide*
 7 *selectively increases sensitivity of ABCC1 expressing tumor cells to doxorubicin*
 8 *and glutathione depletion*, 30 J. BIOMED RES. 120 (2016).
- 9 34. Annexed hereto as PX 33 is a true and correct copy of Rascón *et al.*, *Cloning and*
 10 *characterization of a cAMP-specific phosphodiesterase (TbPDE2B) from*
 11 *Trypanosoma brucei*, 99 PROC. NAT'L. ACAD. SCI. USA 4714 (2002).
- 12 35. Annexed hereto as PX 34 is a true and correct copy of Palucka and Coussens, *The*
 13 *Basis of Oncoimmunology*, 164 CELL 1233 (2016).
- 14 36. Annexed hereto as PX 35 is a true and correct copy of Craun, G.F. & R.L.
 15 Calderon, *How To Interpret Epidemiological Associations* (2006).
- 16 37. Annexed hereto as PX 36 is a true and correct copy of Bataille *et al.*, *Solar*
 17 *Keratosis: A Risk For Melanoma But Negative Association With Melanocytic*
 18 *Naevi*, INT. J. CANCER 8-12 (1998).
- 19 38. Annexed hereto as PX 37 is a true and correct copy of relevant sections of the
 20 *Reference Manual on Scientific Evidence*.
- 21 39. Annexed hereto as PX 38 is a true and correct copy of the Sildenafil Label.
- 22 40. Annexed hereto as PX 39 is a true and correct copy of the Tadalafil Label.
- 23 41. Annexed hereto as PX 40 is a true and correct copy of Ghofrani *et al.*, *Sildenafil:*
 24 *From Angina to Erectile Dysfunction to Pulmonary Hypertension & Beyond*, 5
 25 NAT. REV. DRUG DISC. 689 (2006).

42. Annexed hereto as PX 41 is a true and correct copy of Fidler, *The pathogenesis of cancer metastasis: the 'seed and soil' hypothesis revisited*, 3 NAT. REV. CANCER 453 (2003).

43. Annexed hereto as PX 42 is a true and correct copy of relevant sections of MOD. EPIDEMIOLOGY 2008.

44. Annexed hereto as PX 43 is a true and correct copy of Weed & Husting, *Biologic Plausibility in Causal Inference: Current Method & Practice*, 147 AM. J. EPIDEMIOLOGY 415 (1998).

I declare under penalty of perjury and the laws of the United States and the State of California that the above statements are true and that this Declaration was executed on January 11, 2019, at Birmingham, Alabama.

Dated: January 11, 2019.

CORY WATSON, P.C


Ernest Cory (*Admitted Pro Hac Vice*)
CORY WATSON, P.C.

Lead Counsel for Plaintiffs

CERTIFICATE OF SERVICE

I, Rachel Abrams, hereby certify that on this 11th day of January 2019, I electronically filed the foregoing with the Court using the CM/ECF system and thereby delivered by electronic means to all registered participants as identified on the Notice of Electronic Filing.

/s/ Rachel Abrams

Rachel Abrams